

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) Method for the testing of substrates a substrate provided with a predetermined pattern, comprising
 - optically defining detecting an actual pattern, the actual pattern having been applied to a substrate by a printing or structuring process employing a correspondingly constituted template produced by employing control data,
 - comparing the optically detected actual pattern with a desired pattern, in dependence upon the comparison and taking into account permissible tolerances, determining a further process to which the observed substrate provided with the actual pattern is to be delivered,
 - wherein optically detecting an actual pattern comprises:
 - effecting the optical detection of the actual pattern in the form of digital data and forming an actual data set,
 - formatting a desired data set from the control data employed for producing the application of template for applying the pattern onto the substrates substrate, and
 - carrying out data processing by comparing the desired data set and the actual data set datawise with one another taking into account permissible tolerances.

2. (Canceled).

3. (Previously Presented) Method according to claim 1, comprising testing selected sections of the desired pattern.

4. (Previously Presented) Method according to claim 1, comprising associating different tolerance data subsets with various sections of the desired pattern.
5. (Previously Presented) Method according to claim 1, comprising carrying out data processing by editing the respective data sets with regard to the sections to be compared.
6. (Currently Amended) Method according to claim 1, comprising effecting the optical detection pixel-wise by means of a digital camera.
7. (Previously Presented) Method according to claim 6, comprising effecting relative movement between the digital camera and the substrate carrying the actual pattern for optical detection.
8. (Previously Presented) Method according to claim 7, wherein the digital camera is a linear camera one pixel wide, the length of which corresponds to one linear dimension of the region of the actual pattern on the substrate to be tested, and comprising effecting the relative movement with a step size of one pixel perpendicularly to the one linear dimension.
9. (Previously Presented) Method according to claim 8, wherein the linear camera comprises linear sub-cameras arranged in a staggered manner.
10. (Previously Presented) Method according to claim 1, wherein the substrate, on which the actual pattern to be tested is applied, itself already carries at least one other pattern, and comprising constituting or carrying out the optical

detection so that it discriminates the actual pattern to be tested with respect to the other pattern and the substrate.

11. (Currently Amended) Arrangement for the testing of a substrate substrates provided with a predetermined pattern, comprising

an opto-electronic arrangement for detecting an actual pattern applied to the substrate by a printing or structuring process,

a correspondingly constituted template for applying the pattern onto the substrate,

a comparator for comparing the optically detected actual pattern with a desired pattern and in dependence upon the comparison and taking into account permissible tolerances determining a further process to which the observed substrate provided with the actual pattern is to be delivered,

a converter for converting the pattern detected by the opto-electronic arrangement into an actual data set in the form of digital data, and

a formatter to format a desired data set from control data for the application of the pattern onto the ~~substrate~~ substrate, wherein

the comparator carrying carries out the desired data set and the actual data set datawise with one another taking into account permissible tolerances.

12. - 15. (Canceled)

16. (Previously Presented) Arrangement according to claim 11, comprising a digital camera for effecting the optical detection pixel-wise.

17. (Previously Presented) Arrangement according to claim 16, the digital camera can move relative to the substrate carrying the actual pattern for optical detection.

18. (Previously Presented) Arrangement according to claim 17, wherein the digital camera is a linear camera one pixel wide, the length of which corresponds to one linear dimension of the region of the actual pattern on the substrate to be tested, and the relative movement can be effected with a step size of one pixel perpendicularly to the one linear dimension.

19. (Previously Presented) Arrangement according to claim 18, wherein the linear camera comprising linear sub-cameras arranged in a staggered manner.

20. (Previously Presented) Arrangement according to claim 11, wherein the substrate, on which the actual pattern to be tested is applied, itself already carries at least one other pattern and the optical detection can be so constituted or so carried out that it discriminates the actual pattern to be tested with respect to the other pattern and the substrate.

21. (Currently Amended) Method according to claim [[2]] 1, comprising testing of the template for faults arising in the course of use.

22. (Previously Presented) Method according to claim 4, comprising carrying out data processing by editing the respective data sets with regard to the associated tolerances.